

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 12 (cancelled)

13. (currently amended) An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide comprising an amino acid sequence selected from the group consisting of:

- a) a mature form of the amino acid sequence given SEQ ID NO: ~~2n, wherein n is an integer between 1 and 178112;~~
- b) a variant of a mature form of the amino acid sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n, wherein n is an integer between 1 and 178112,~~ wherein any amino acid in the mature form of the chosen sequence is changed to a different amino acid, provided that no more than 15% of the amino acid residues in the sequence of the mature form are so changed;
- c) the amino acid sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n, wherein n is an integer between 1 and 178112;~~
- d) a variant of the amino acid sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n, wherein n is an integer between 1 and 178112,~~ in which any amino acid specified in the chosen sequence is changed to a different amino acid, provided that no more than 15% of the amino acid residues in the sequence are so changed;
- e) a nucleic acid fragment encoding at least a portion of a polypeptide comprising the amino acid sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n, wherein n is an integer between 1 and 178112,~~ or any variant of said polypeptide wherein any amino acid of the chosen sequence is changed to a different amino acid, provided that no more than 10% of the amino acid residues in the sequence are so changed; and
- f) the complement of any of said nucleic acid molecules.

14. (original) The nucleic acid molecule of claim 13, wherein the nucleic acid molecule comprises the nucleotide sequence of a naturally occurring allelic nucleic acid variant.

15. (original) The nucleic acid molecule of claim 13 that encodes a variant polypeptide, wherein the variant polypeptide has the polypeptide sequence of a naturally occurring polypeptide variant.

16. (currently amended) The nucleic acid molecule of claim 13, wherein the nucleic acid molecule differs by a single nucleotide from a nucleic acid sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n-1, wherein n is an integer between 1 and 178111~~.

17. (currently amended) The nucleic acid molecule of claim 13, wherein said nucleic acid molecule comprises a nucleotide sequence selected from the group consisting of

a) the nucleotide sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n-1, wherein n is an integer between 1 and 178111~~;

b) a nucleotide sequence wherein one or more nucleotides in the nucleotide sequence ~~selected from the group consisting of given~~ SEQ ID NO: 111, is changed from that selected from the group consisting of the chosen sequence to a different nucleotide provided that no more than 15% of the nucleotides are so changed;

c) a nucleic acid fragment of the sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n-1, wherein n is an integer between 1 and 178111~~; and

d) a nucleic acid fragment wherein one or more nucleotides in the nucleotide sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n-1, wherein n is an integer between 1 and 178111~~ is changed from that selected from the group consisting of the chosen sequence to a different nucleotide provided that no more than 15% of the nucleotides are so changed.

18. (currently amended) The nucleic acid molecule of claim 13, wherein said nucleic acid molecule hybridizes under stringent conditions to the nucleotide sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n-1, wherein n is an integer between 1 and 178111~~, or a complement of said nucleotide sequence.

19. (currently amended) The nucleic acid molecule of claim 13, wherein the sequence is changed such that no more than 15% of the nucleotides in the coding sequence differ from the nucleotide sequence ~~selected from the group consisting of given~~ SEQ ID NO: ~~2n-1~~, wherein ~~n~~ ~~is an integer between 1 and 178111~~, or a fragment thereof.

20. (original) A vector comprising the nucleic acid molecule of claim 19.

21. (original) The vector of claim 20, further comprising a promoter operably linked to said nucleic acid molecule.

22. (original) A cell comprising the vector of claim 20.

23 – 26. (cancelled)